5. (New) The method of claim 4 wherein said formatting includes padding said ATM cells with additional bits.

6. (New) The method of claim 4 wherein said ATM cells are formatted at a first card that is implemented separately from a second card implementing said packet switch.

7. (New) The method of claim 5 wherein said first card and said second card are coupled via an optical fiber.

8. (New) The method of claim 6 wherein said optical fiber carries data originally contained in both said ATM cells and said packet switch.

9. (New) The method of claim 4 wherein said first circuit and said second circuit are implemented on a single line card.

10. (New) The method of claim 8 wherein said formatting includes associating said ATM cell-containing packets with tags, said tags allowing a receiver circuit receiving said ATM cell-containing packets from said packet switch to identify said ATM cell-containing packets as packet-like series of bits having therein ATM cells.

11. (New) The method of claim 1 wherein said formatting includes associating said ATM cell-containing packets with packet headers, said packet headers allowing a receiver circuit receiving said ATM cell-containing packets from said packet switch to identify said ATM cell-containing packets.

12. (New) The method of claim 11 wherein said formatting includes

ascertaining destination information for a given ATM cell to be switched, and

putting said destination information into a packet header to be included in a given ATM cell-containing packet, said given ATM cell-containing packet representing a packet-like series of bits having therein said given ATM cell.

13. (New) A router for routing both ATM cells and packets received from a plurality of router input ports to a plurality of router output ports, comprising:

a first circuit for receiving said ATM cells;

a second circuit for receiving said packets;

a third circuit coupled to said first circuit and said second circuit for aggregating selected ones of said ATM cells and selected ones of said packets into a combined data stream that contains data from both said selected ones of said ATM cells and said selected ones of said packets and outputting said combined data stream; and

a switch coupled to said third circuit for receiving said combined data stream, said switch directing information pertaining to individual ones of said selected ones of said ATM cells and said selected ones of said packets to respective ones of said plurality of router output ports, said respective ones of said router output ports being ascertained from packet headers associated with said information pertaining to individual ones of said selected ones of said ATM cells and said selected ones of said packets.

14. (New) The router of claim 13 wherein said first circuit, said second circuit, and said third circuit are implemented on a first line card.

15. (New) The router of claim 14 wherein said switch is implemented on a second line card that is different from said first line card.

16. (New) The router of claim 15 wherein said first line card and said second line card are coupled via an optical fiber, said optical fiber being configured to transport said combined data stream.

17. (New) The router of claim 13 further comprising a traffic management circuit coupled to said third circuit, said traffic management circuit monitoring said ATM cells and said packets to ascertain transmission priorities associated with individual ones of said ATM cells and said packets, said third circuit selecting said selected ones of said ATM cells and said selected ones of said packets for outputting in said combined data stream based on the transmission priorities.

18. (New) The router of claim 14 wherein a given flow associated with said ATM cells is given a minimum bandwidth guarantee by said traffic management circuit, thereby guaranteeing that at least some ATM cells associated with said given flow is passed onto said switch irrespective of traffic condition through said third circuit.